

PRESS RELEASE

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„PhotonHub Europe“: Strengthening European competitiveness through industrial use of Photonics

A photonics network of pan-European scale will start in January 2021 as part of the EU Horizon 2020 program: The project „Photonics Digital Innovation Hub“ – PhotonHub Europe for short – is designed to make small and medium-sized European companies fit for the future by supporting them in the use of photonic technologies. The „PhotonHub Europe“ expects more than 1000 new high-tech jobs and around one billion euros in sales by 2025. The Fraunhofer Institute for Laser Technology ILT coordinates one of the eight technology platforms. With its focus on laser-based production, this platform plays an important role in European photonics.

In the best sense, it is a ray of hope for Europe in these times: In January 2021, the PhotonHub Europe will be launched with a budget of 19 million euros from the EU Horizon 2020 program. The EU has its sights set on small and medium-sized enterprises (SMEs) that have not yet been involved in the use of photonics for their business. To this end, a total of 53 research and photonics centers from all over Europe are working closely together to provide SMEs with access to photonics knowledge and technology and thus open up new business fields for them. However, it is also open to all European companies that have already engaged with photonics and now want to tackle additional innovations.

Bundled photonics innovation power

Prof. Hugo Thienpont, Director of Brussels-Photonics (B-PHOT) at the Vrije Universiteit Brussel (VUB), plays a key role in this major project. As the overall coordinator of PhotonHub Europe, he is responsible for all activities of the platform. He sees photonics as a key technology for new applications that will drive industry 4.0 and fundamentally address the enormous global, social and environmental challenges of our time. Thienpont: „European industry must be at the forefront of innovation with photonics, make the most of our combined strengths in all parts of the innovation value chain and work together across all member states to support innovation and growth of European companies“. The PhotonHub Europe should play a decisive role in this process.

Pan-European cooperation with 15 years of experience

The PhotonHub Europe builds on a solid foundation of more than 15 years of experience from European projects and on the networking and already existing

Editorial Notes

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cooperation of all partners involved. A Cooperation with well-established European networks such as the Enterprise Europe Network (EEN) and the European Business Network (EBN) is also planned. Three core objectives are at the center of this pan-European joint action: The PhotonHub Europe supports SMEs in training and further qualification, promotes innovation under the objective „Test Before Invest“ and assists in finding investors.

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Economic success through digital thinking in photonic production

The eight technology platforms play an important role in this ambitious project. All the activities of the „Laser-based Manufacturing“ platform are coordinated by Ulrich Thombsen, a scientist at Fraunhofer ILT, as the leading representative. In the field of photonic manufacturing processes, for example, the Aachen-based team can contribute many years of experience from the EU project AMable, which has already paved the way for many SMEs to industrial 3D printing with metal and plastic. „We have taught SMEs to think additive,“ says the scientist, looking back on the AMable-project. „We've shown many companies how to use laser-based manufacturing technologies profitably with ‚digital thinking‘“.

Fraunhofer ILT coordinates international technology platform

In the same way, Thombsen wants to pave the way for a wide range of laser-based manufacturing processes for SMEs: from micro laser welding and micro- and nanostructuring with the ultra-short pulse (USP) laser to laser polishing and additive processes such as laser powder bed fusion (LPBF) or laser material deposition (LMD). It is therefore important for the scientist to get in touch with the companies directly, to advise them and to discuss the best way to enter laser-based production with them. Thombsen: „The ‚Laser-based Manufacturing‘ platform offers SMEs central access to numerous European colleagues with many years of experience and a great deal of practical knowledge.“

More about the „Laser-based Manufacturing“ platform:
https://www.ilt.fraunhofer.de/en/projects-technology-studies/cp_current/cp-photonhub.html

Further information about the pan-European PhotonHub Europe and the participating research centers: <https://www.photonhub.eu>.

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Image 1:
With the "Laser-based Manufacturing" technology platform, experts from Fraunhofer ILT offer SMEs central access to numerous European specialist colleagues with years of experience. In the picture: Laser Material Deposition (LMD).
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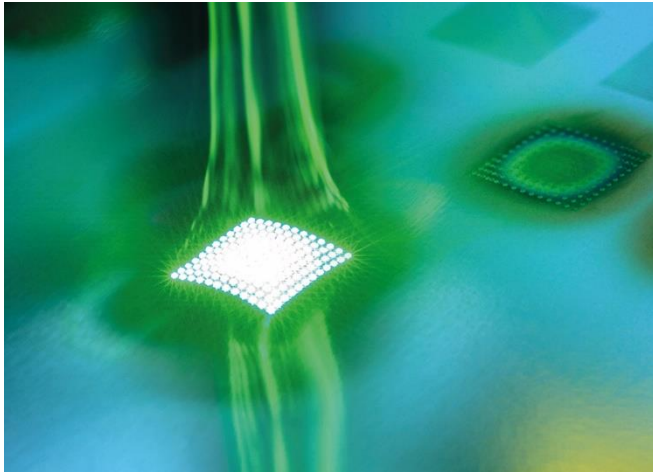


Image 2:
Multibeam technology opens up numerous new application possibilities for SMEs, expert knowledge can be found in the PhotonHub.
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Image 3:
The "Laser-based Manufacturing" technology platform shows SMEs, for example, how the use of laser drilling can optimize their production processes.
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